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REVISIONS


LTR	DESCRIPTION	DATE	APPROVED
A	PROD. RELEASE PER E.O. 00634	7/21/81	<i>[Signature]</i>
D	INC. PER E.O. 01039	4 JUNE 82	<i>[Signature]</i>

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 ACT		All Computer Test-takers	
SCHEMATIC-16 CH. RS232C/C.L. DIST PNL			
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DATA CHO-7

SHT	J3	SHT
7	DTROO-H 1 2 CARROO-H 7	
8	DTRO1-H 3 4 CARRO1-H 8	
9	DTRO2-H 5 6 CARRO2-H 9	
10	DTRO3-H 7 8 CARRO3-H 10	
11	DTRO4-H 9 10 CARRO4-H 11	
12	DTRO5-H 11 12 CARRO5-H 12	
13	DTRO6-H 13 14 CARRO6-H 13	
14	DTRO7-H 15 16 CARRO7-H 14	
7	MAIN-H 17 18 GND 4	
7	TXDOO-H 19 20 RINGOO-H 7	
7	RXD00-H 21 22 GND 4	
8	TXDO1-H 23 24 RINGO1-H 8	
8	RXD01-H 25 26 GND 4	
9	TXDO2-H 27 28 RINGO2-H 9	
9	RXD02-H 29 30 +5V 4	
10	TXDO3-H 31 32 RINGO3-H 10	
10	RXD03-H 33 34 +5V 4	
11	TXDO4-H 35 36 RINGO4-H 11	
11	RXD04-H 37 38 +5V 4	
12	TXDO5-H 39 40 RINGO5-H 12	
12	RXD05-H 41 42 -15V 4	
13	TXDO6-H 43 44 RINGO6-H 13	
13	RXD06-H 45 46 -15V 4	
14	TXDO7-H 47 48 RINGO7-H 14	
14	RXD07-H 49 50 -15V 4	

MAINTENANCE CHO-7

SHT	J7	SHT
23	DTROO-H 1 2 CARROO-H 23	
23	DTRO1-H 3 4 CARRO1-H 23	
23	DTRO2-H 5 6 CARRO2-H 23	
23	DTRO3-H 7 8 CARRO3-H 23	
23	DTRO4-H 9 10 CARRO4-H 23	
23	DTRO5-H 11 12 CARRO5-H 23	
23	DTRO6-H 13 14 CARRO6-H 23	
23	DTRO7-H 15 16 CARRO7-H 23	
23	TXDOO-H 17 18 RINGOO-H 23	
23	RXD00-H 21 22	
23	TXDO1-H 23 24 RINGO1-H 23	
23	RXD01-H 25 26	
23	TXDO2-H 27 28 RINGO2-H 23	
23	RXD02-H 29 30	
23	TXDO3-H 31 32 RINGO3-H 23	
23	RXD03-H 33 34	
23	TXDO4-H 35 36 RINGO4-H 23	
23	RXD04-H 37 38	
23	TXDO5-H 39 40 RINGO5-H 23	
23	RXD05-H 41 42	
23	TXDO6-H 43 44 RINGO6-H 23	
23	RXD06-H 45 46	
23	TXDO7-H 47 48 RINGO7-H 23	
23	RXD07-H 49 50	

STAGGERED MAINT. CHO-7

SHT	J5	SHT
24	DTROO-H 1 2 CARROO-H 24	
24	DTRO1-H 3 4 CARRO1-H 24	
24	DTRO2-H 5 6 CARRO2-H 24	
24	DTRO3-H 7 8 CARRO3-H 24	
24	DTRO4-H 9 10 CARRO4-H 24	
24	DTRO5-H 11 12 CARRO5-H 24	
24	DTRO6-H 13 14 CARRO6-H 24	
24	DTRO7-H 15 16 CARRO7-H 24	
24	TXDOO-H 17 18 RINGOO-H 24	
24	RXD00-H 21 22	
24	TXDO1-H 23 24 RINGO1-H 24	
24	RXD01-H 25 26	
24	TXDO2-H 27 28 RINGO2-H 24	
24	RXD02-H 29 30	
24	TXDO3-H 31 32 RINGO3-H 24	
24	RXD03-H 33 34	
24	TXDO4-H 35 36 RINGO4-H 24	
24	RXD04-H 37 38	
24	TXDO5-H 39 40 RINGO5-H 24	
24	RXD05-H 41 42	
24	TXDO6-H 43 44 RINGO6-H 24	
24	RXD06-H 45 46	
24	TXDO7-H 47 48 RINGO7-H 24	
24	RXD07-H 49 50	

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DATA CH8-15

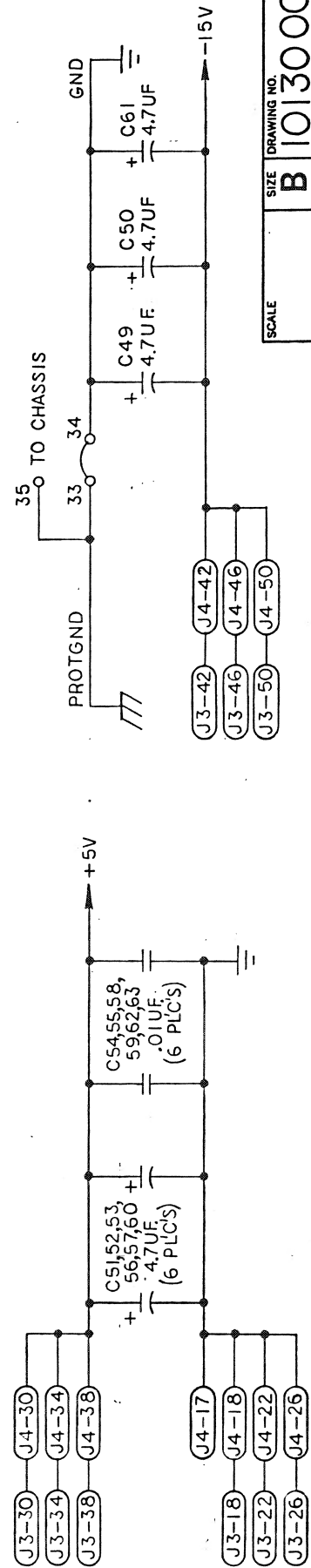
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15	DTR08-H 1 2 CARRO8-H 15	
16	DTR09-H 3 4 CARRO9-H 16	
17	DTR10-H 5 6 CARR10-H 17	
18	DTR11-H 7 8 CARR11-H 18	
19	DTR12-H 9 10 CARR12-H 19	
20	DTR13-H 11 12 CARR13-H 20	
21	DTR14-H 13 14 CARR14-H 21	
22	DTR15-H 15 16 CARR15-H 22	
4	GND 17 18 GND 4	
15	TXD08-H 19 20 RING08-H 15	
16	TXD09-H 21 22 RING09-H 16	
17	TXD10-H 23 24 RING10-H 17	
18	TXD11-H 25 26 RING11-H 18	
19	TXD12-H 27 28 RING12-H 19	
20	TXD13-H 29 30 RING13-H 20	
21	TXD14-H 31 32 RING14-H 21	
22	TXD15-H 33 34 RING15-H 22	
4	GND 35 36 GND 4	
15	TXD08-H 37 38 RING12-H 15	
16	TXD09-H 39 40 RING13-H 16	
17	TXD10-H 41 42 RING14-H 17	
18	TXD11-H 43 44 RING15-H 18	
19	TXD12-H 45 46 RING16-H 19	
20	TXD13-H 47 48 RING17-H 20	
21	TXD14-H 49 50 RING18-H 21	
22	TXD15-H 51 52 RING19-H 22	

MAINTENANCE CH8-15

SHT	J8	SHT
23	DTR08-H 1 2 CARRO8-H 23	
24	DTR09-H 3 4 CARRO9-H 24	
25	DTR10-H 5 6 CARR10-H 25	
26	DTR11-H 7 8 CARR11-H 26	
27	DTR12-H 9 10 CARR12-H 27	
28	DTR13-H 11 12 CARR13-H 28	
29	DTR14-H 13 14 CARR14-H 29	
30	DTR15-H 15 16 CARR15-H 30	
31	GND 17 18 GND 31	
32	TXD08-H 19 20 RING08-H 32	
33	TXD09-H 21 22 RING09-H 33	
34	TXD10-H 23 24 RING10-H 34	
35	TXD11-H 25 26 RING11-H 35	
36	TXD12-H 27 28 RING12-H 36	
37	TXD13-H 29 30 RING13-H 37	
38	TXD14-H 31 32 RING14-H 38	
39	TXD15-H 33 34 RING15-H 39	
40	GND 35 36 GND 40	
41	TXD08-H 37 38 RING12-H 41	
42	TXD09-H 39 40 RING13-H 42	
43	TXD10-H 41 42 RING14-H 43	
44	TXD11-H 43 44 RING15-H 44	
45	TXD12-H 45 46 RING16-H 45	
46	TXD13-H 47 48 RING17-H 46	
47	TXD14-H 49 50 RING18-H 47	
48	TXD15-H 51 52 RING19-H 48	

STAGGERED MAINT. CH8-15

SHT	J6	SHT
24	DTR08-H 1 2 CARRO8-H 24	
25	DTR09-H 3 4 CARRO9-H 25	
26	DTR10-H 5 6 CARR10-H 26	
27	DTR11-H 7 8 CARR11-H 27	
28	DTR12-H 9 10 CARR12-H 28	
29	DTR13-H 11 12 CARR13-H 29	
30	DTR14-H 13 14 CARR14-H 30	
31	DTR15-H 15 16 CARR15-H 31	
32	GND 17 18 GND 32	
33	TXD08-H 19 20 RING08-H 33	
34	TXD09-H 21 22 RING09-H 34	
35	TXD10-H 23 24 RING10-H 35	
36	TXD11-H 25 26 RING11-H 36	
37	TXD12-H 27 28 RING12-H 37	
38	TXD13-H 29 30 RING13-H 38	
39	TXD14-H 31 32 RING14-H 39	
40	TXD15-H 33 34 RING15-H 40	
41	GND 35 36 GND 41	
42	TXD08-H 37 38 RING12-H 42	
43	TXD09-H 39 40 RING13-H 43	
44	TXD10-H 41 42 RING14-H 44	
45	TXD11-H 43 44 RING15-H 45	
46	TXD12-H 45 46 RING16-H 46	
47	TXD13-H 47 48 RING17-H 47	
48	TXD14-H 49 50 RING18-H 48	
49	TXD15-H 51 52 RING19-H 49	



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PIN	CH - 0	CH - 1	CH - 2	CH - 3	CH - 4	CH - 5	CH - 6	CH - 7	SHT
1	PROT GND	PROT GND	PROT GND	PROT GND	PROT GND	PROT GND	PROT GND	PROT GND	14
2	TXDOO -H	TXDOI -H	TXDO2 -H	TXDO3 -H	TXDO4 -H	TXDO5 -H	TXDO6 -H	TXDO7 -H	14
3	RXDOO -H	RXDOI -H	RXDO2 -H	RXDO3 -H	RXDO4 -H	RXDO5 -H	RXDO6 -H	RXDO7 -H	14
4	DTROO -H	DTROI -H	DTRO2 -H	DTRO3 -H	DTRO4 -H	DTRO5 -H	DTRO6 -H	DTRO7 -H	14
5									
6									
7	GND	GND	GND	GND	GND	GND	GND	GND	14
8	CARROO -H	CARROI -H	CARRO2 -H	CARRO3 -H	CARRO4 -H	CARRO5 -H	CARRO6 -H	CARRO7 -H	14
9	GND	GND	GND	GND	GND	GND	GND	GND	14
10	TXCOO -P	TXCOI -P	TXCO2 -P	TXCO3 -P	TXCO4 -P	TXCO5 -P	TXCO6 -P	TXCO7 -P	14
11									
12									
13	TXCOO -N	TXCOI -N	TXCO2 -N	TXCO3 -N	TXCO4 -N	TXCO5 -N	TXCO6 -N	TXCO7 -N	14
14	TXCSOO -N	TXCSOI -N	TXCSO2 -N	TXCSO3 -N	TXCSO4 -N	TXCSO5 -N	TXCSO6 -N	TXCSO7 -N	14
15	TXCSOO -P	TXCSOI -P	TXCSO2 -P	TXCSO3 -P	TXCSO4 -P	TXCSO5 -P	TXCSO6 -P	TXCSO7 -P	14
16	RXC5OO -N	RXC5OI -N	RXC5O2 -N	RXC5O3 -N	RXC5O4 -N	RXC5O5 -N	RXC5O6 -N	RXC5O7 -N	14
17	RXC5OO -P	RXC5OI -P	RXC5O2 -P	RXC5O3 -P	RXC5O4 -P	RXC5O5 -P	RXC5O6 -P	RXC5O7 -P	14
18	RXC0O -N	RXC0I -N	RXC02 -N	RXC03 -N	RXC04 -N	RXC05 -N	RXC06 -N	RXC07 -N	14
19	RFCOO -N	RFCOI -N	RFCO2 -N	RFCO3 -N	RFCO4 -N	RFCO5 -N	RFCO6 -N	RFCO7 -N	14
20	DTROO -H	DTROI -H	DTRO2 -H	DTRO3 -H	DTRO4 -H	DTRO5 -H	DTRO6 -H	DTRO7 -H	14
21									
22	RINGOO -H	RINGOI -H	RINGO2 -H	RINGO3 -H	RINGO4 -H	RINGO5 -H	RINGO6 -H	RINGO7 -H	14
23	RXC0O -P	RXC0I -P	RXC02 -P	RXC03 -P	RXC04 -P	RXC05 -P	RXC06 -P	RXC07 -P	14
24	RCDOO -H	RCDOI -H	RCDO2 -H	RCDO3 -H	RCDO4 -H	RCDO5 -H	RCDO6 -H	RCDO7 -H	14
25	MAIN -L	MAIN -L	MAIN -L	MAIN -L	MAIN -L	MAIN -L	MAIN -L	MAIN -L	14

EIA CONNECTORS

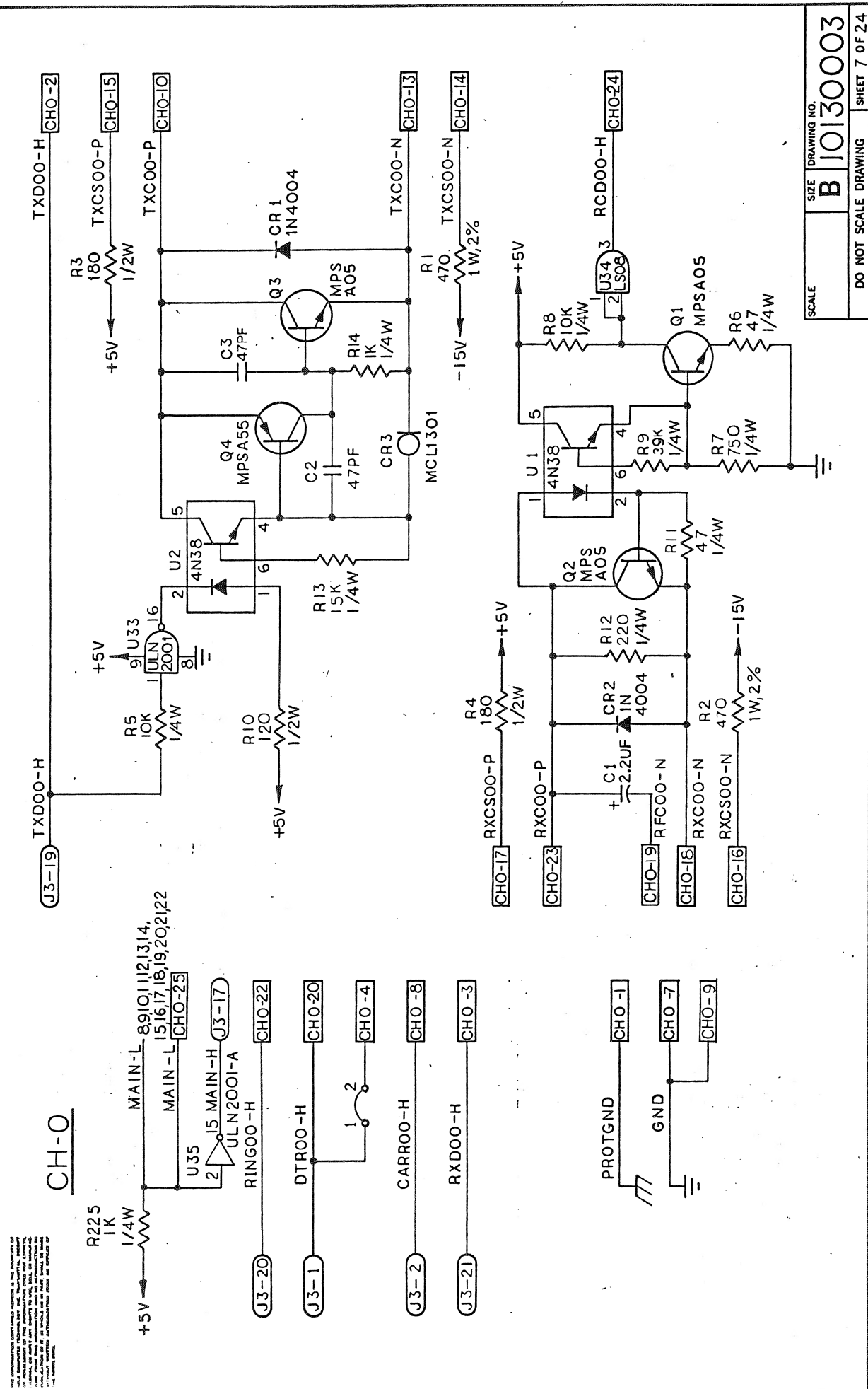
CHO — CH7

Not for use in applications requiring high speed or high accuracy of timing. The accuracy of the timing is dependent on the accuracy of the external clock source. The accuracy of the timing is dependent on the accuracy of the external clock source. The accuracy of the timing is dependent on the accuracy of the external clock source.

PIN	CH - 8	SHT	PIN	CH - 9	SHT	PIN	CH - 10	SHT	PIN	CH - 11	SHT	PIN	CH - 12	SHT	PIN	CH - 13	SHT	PIN	CH - 14	SHT	PIN	CH - 15	SHT
1	PROTGND	15	1	PROTGND	16	1	PROTGND	17	1	PROTGND	18	1	PROTGND	19	1	PROTGND	20	1	PROTGND	21	1	PROTGND	22
2	TXDO8 -H	15	2	TXDO9 -H	16	2	TXDIO -H	17	2	TXDII -H	18	2	TXDI2 -H	19	2	TXDI3 -H	20	2	TXDI4 -H	21	2	TXDI5 -H	22
3	RXDO8 -H	15	3	RXDO9 -H	16	3	RXDIO -H	17	3	RXDI1 -H	18	3	RXD12 -H	19	3	RXD13 -H	20	3	RXD14 -H	21	3	RXD15 -H	22
4	DTRO8 -H	15	4	DTRO9 -H	16	4	DTRIO -H	17	4	DTRI1 -H	18	4	DTRI2 -H	19	4	DTRI3 -H	20	4	DTRI4 -H	21	4	DTRI5 -H	22
5			5			5			5			5			5			5			5		
6			6			6			6			6			6			6			6		
7	GND	15	7	GND	16	7	GND	17	7	GND	18	7	GND	19	7	GND	20	7	GND	21	7	GND	22
8	CARRO8 -H	15	8	CARRO9 -H	16	8	CARRIO -H	17	8	CARRI1 -H	18	8	CARRI2 -H	19	8	CARRI3 -H	20	8	CARRI4 -H	21	8	CARRI5 -H	22
9	GND	15	9	GND	16	9	GND	17	9	GND	18	9	GND	19	9	GND	20	9	GND	21	9	GND	22
10	TXCO8 -P	15	10	TXCO9 -P	16	10	TXCIO -P	17	10	TXCI1 -P	18	10	TXCI2 -P	19	10	TXCI3 -P	20	10	TXCI4 -P	21	10	TXCI5 -P	22
11			11			11			11			11			11			11			11		
12			12			12			12			12			12			12			12		
13	TXCO8 -N	15	13	TXCO9 -N	16	13	TXCIO -N	17	13	TXCI1 -N	18	13	TXCI2 -N	19	13	TXCI3 -N	20	13	TXCI4 -N	21	13	TXCI5 -N	22
14	TXCSO8 -N	15	14	TXCSO9 -N	16	14	TXCSIO -N	17	14	TXCSI1 -N	18	14	TXCSI2 -N	19	14	TXCSI3 -N	20	14	TXCSI4 -N	21	14	TXCSI5 -N	22
15	TXCSO8 -P	15	15	TXCSO9 -P	16	15	TXCSIO -P	17	15	TXCSI1 -P	18	15	TXCSI2 -P	19	15	TXCSI3 -P	20	15	TXCSI4 -P	21	15	TXCSI5 -P	22
16	RXCSO8 -N	15	16	RXCSO9 -N	16	16	RXCSIO -N	17	16	RXCSI1 -N	18	16	RXCSI2 -N	19	16	RXCSI3 -N	20	16	RXCSI4 -N	21	16	RXCSI5 -N	22
17	RXCSO8 -P	15	17	RXCSO9 -P	16	17	RXCSIO -P	17	17	RXCSI1 -P	18	17	RXCSI2 -P	19	17	RXCSI3 -P	20	17	RXCSI4 -P	21	17	RXCSI5 -P	22
18	RXCO8 -N	15	18	RXCO9 -N	16	18	RXCIO -N	17	18	RXCI1 -N	18	18	RXCI2 -N	19	18	RXCI3 -N	20	18	RXCI4 -N	21	18	RXCI5 -N	22
19	RFCO8 -N	15	19	RFCO9 -N	16	19	RFCIO -N	17	19	RFCI1 -N	18	19	RFCI2 -N	19	19	RFCI3 -N	20	19	RFCI4 -N	21	19	RFCI5 -N	22
20	DTRO8 -H	15	20	DTRO9 -H	16	20	DTRIO -H	17	20	DTRI1 -H	18	20	DTRI2 -H	19	20	DTRI3 -H	20	20	DTRI4 -H	21	20	DTRI5 -H	22
21			21			21			21			21			21			21			21		
22	RINGO8 -H	15	22	RINGO9 -H	16	22	RINGIO -H	17	22	RINGI1 -H	18	22	RINGI2 -H	19	22	RINGI3 -H	20	22	RINGI4 -H	21	22	RINGI5 -H	22
23	RXCO8 -P	15	23	RXCO9 -P	16	23	RXCIO -P	17	23	RXCI1 -P	18	23	RXCI2 -P	19	23	RXCI3 -P	20	23	RXCI4 -P	21	23	RXCI5 -P	22
24	RCDO8 -H	15	24	RCDO9 -H	16	24	RCDIO -H	17	24	RCDI1 -H	18	24	RCDI2 -H	19	24	RCDI3 -H	20	24	RCDI4 -H	21	24	RCDI5 -H	22
25	MAIN-L	15	25	MAIN-L	16	25	MAIN-L	17	25	MAIN-L	18	25	MAIN-L	19	25	MAIN-L	20	25	MAIN-L	21	25	MAIN-L	22

EIA. CONNECTORS

CH8 — CH15



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CH-1

7 MAIN-L

RINGO I-H

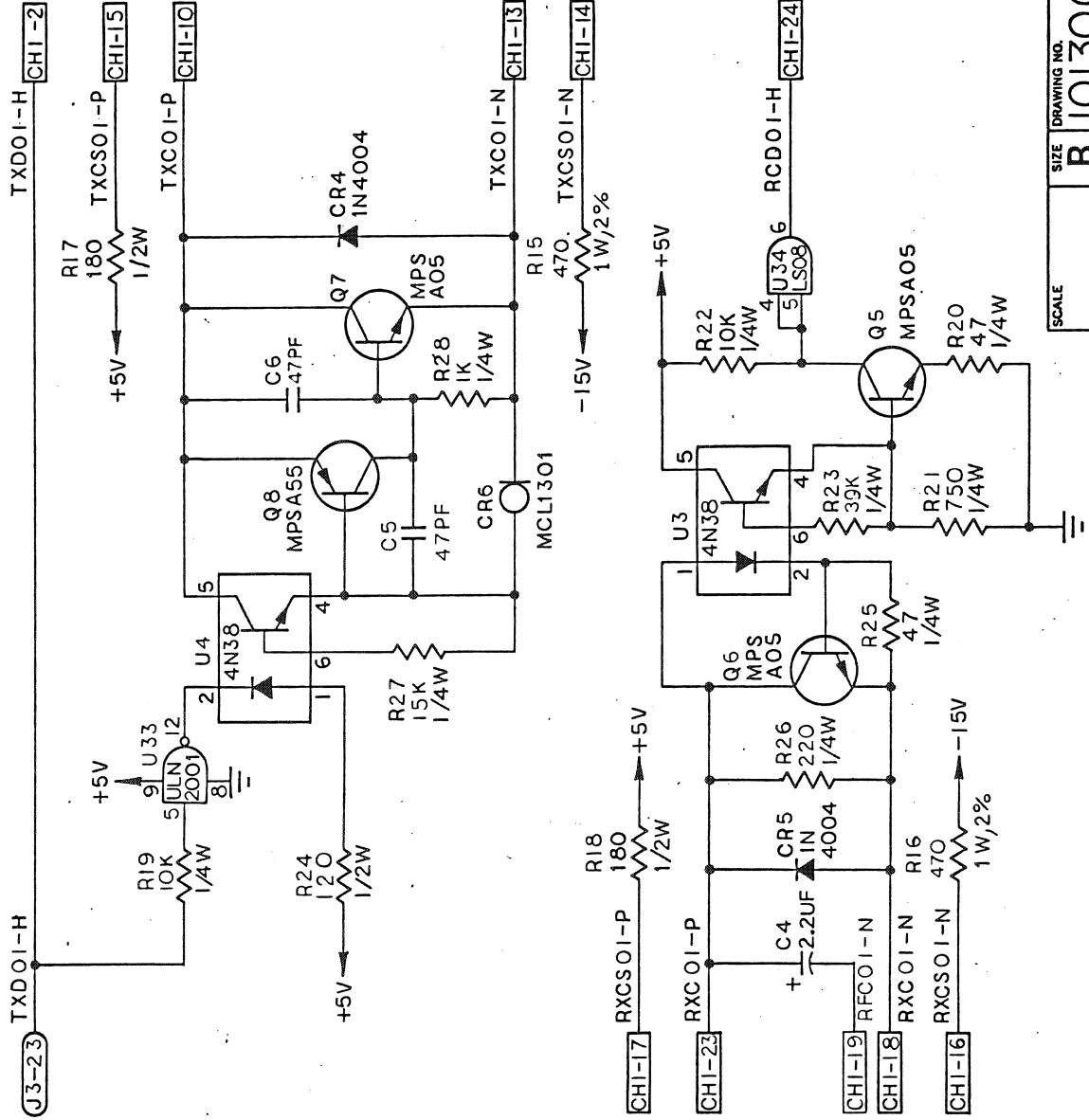
DTRO I-H

CARRO I-H

RXDO I-H

PROT GND

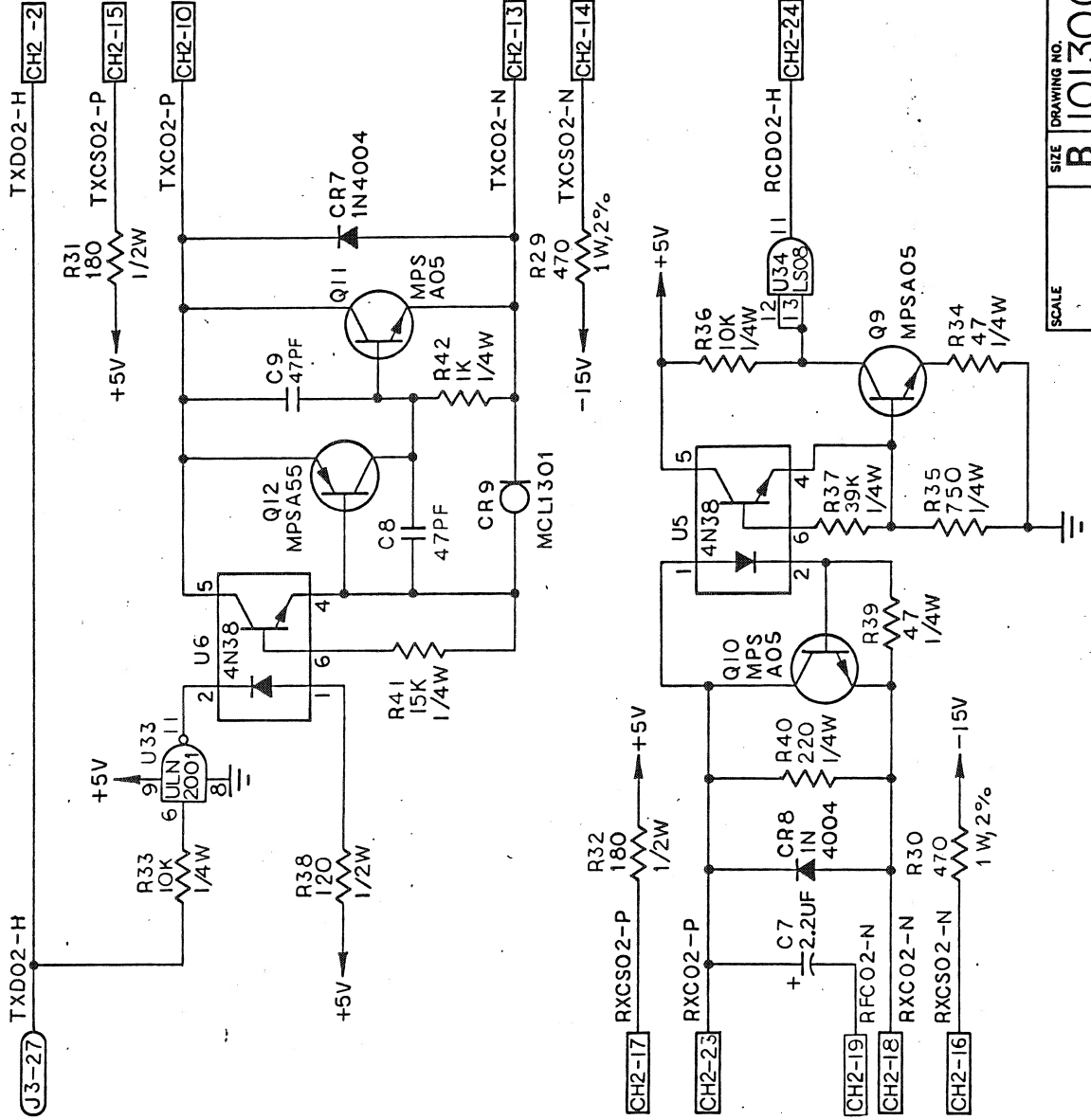
GND



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CH-2

- 7 MAIN-L CH2-25
- RINGO2-H CH2-22
- DTR02-H CH2-20
- 5 6 CH2-4
- CARRO2-H CH2-8
- RXDO2-H CH2-3



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CH-3

7 MAIN-L CH3-25

J3-32 RINGO3-H CH3-22

J3-7 DTR03-H CH3-20

7 8 CH3-4

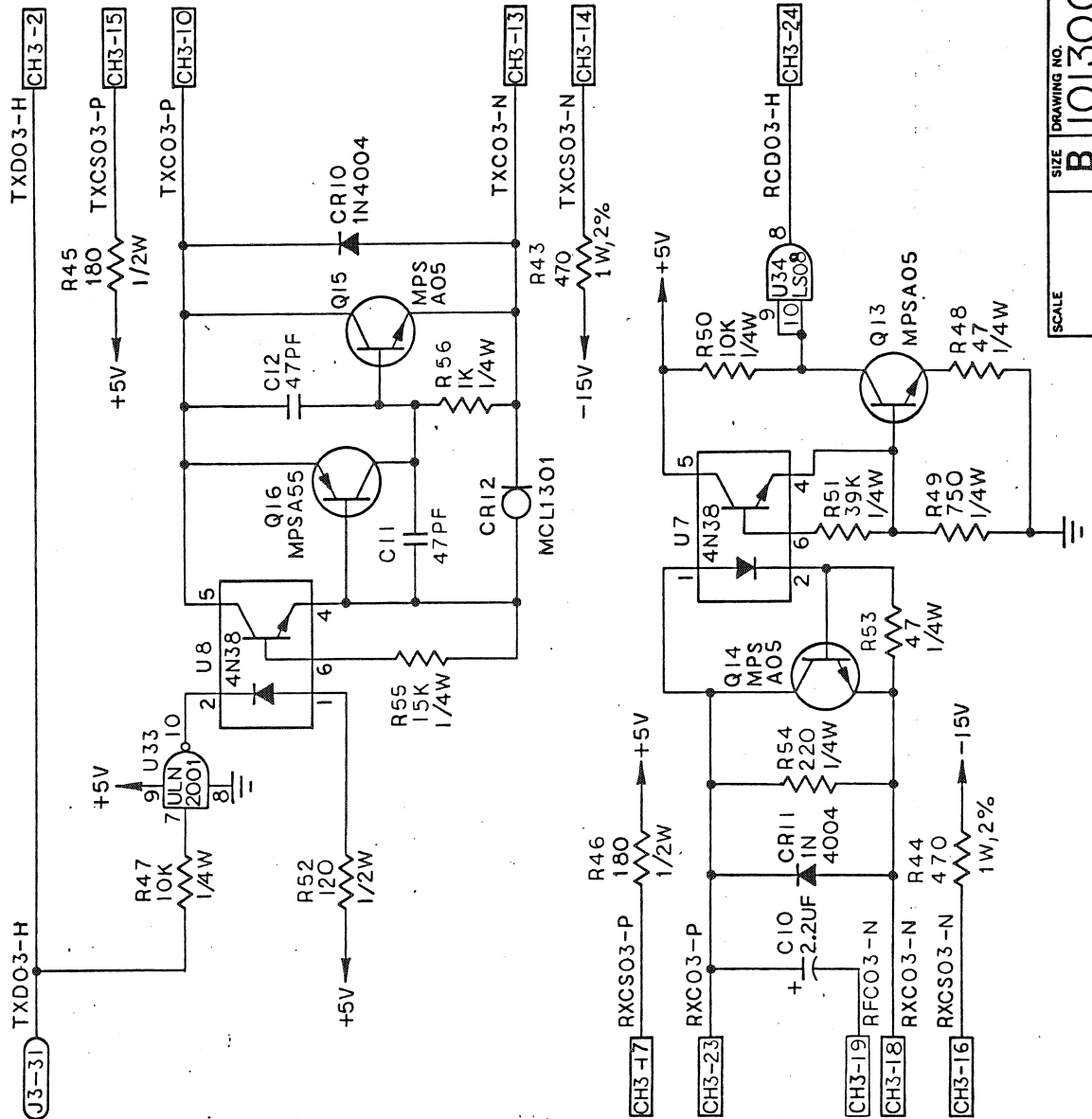
J3-8 CARRO3-H CH3-8

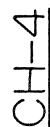
J3-33 RXDO3-H CH3-3

PROTGND CH3-1

GND CH3-7

CH3-9





RXDO4-H

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CH-5

7 MAIN-H

RINGO5-H

DTRO5-H

CARRO5-H

RXDO5-H

PROTGND

GND

CH5-25

CH5-22

CH5-20

CH5-4

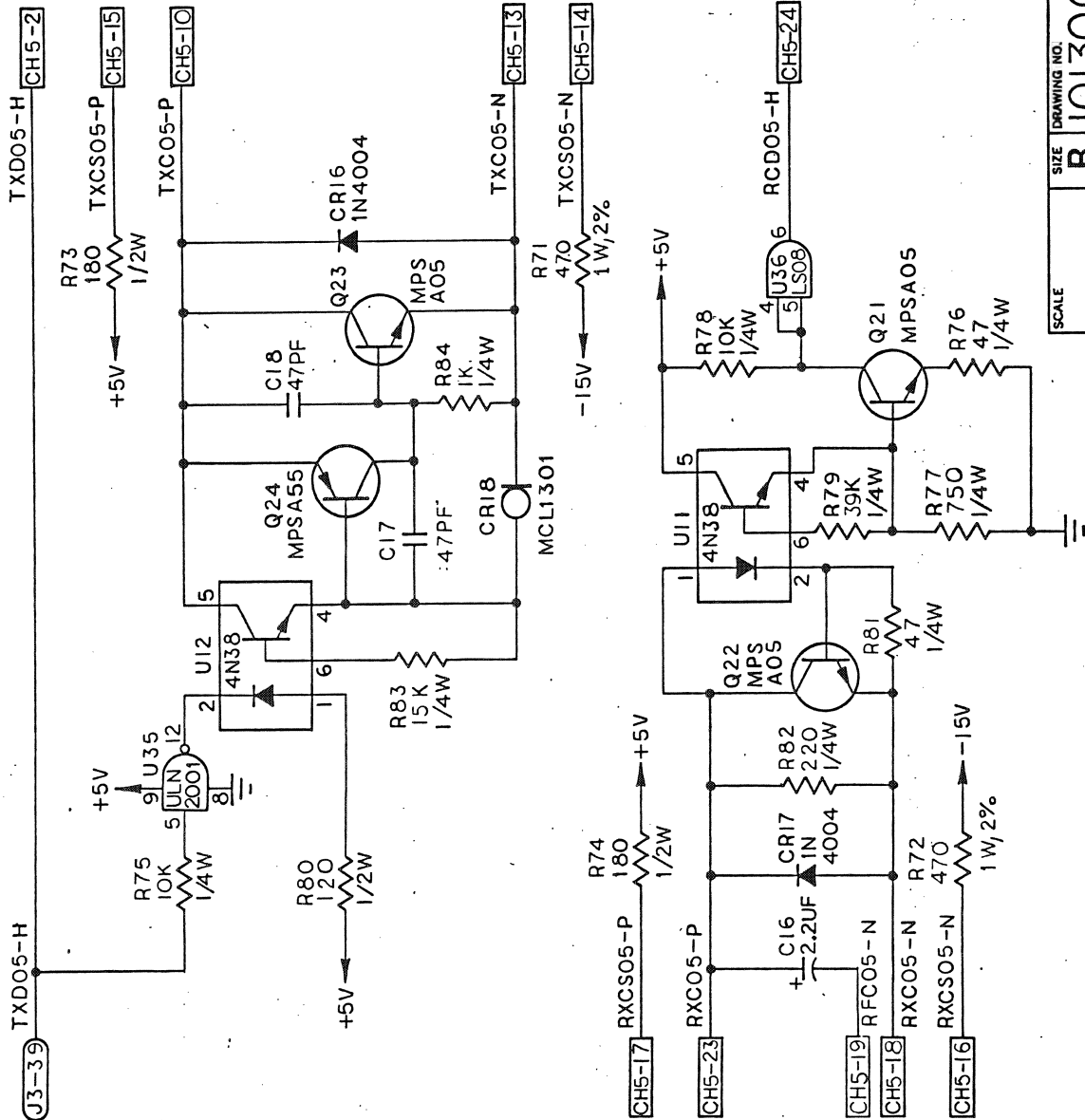
CH5-8

CH5-3

CH5-1

CH5-7

CH5-9



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CH-6

7 MAIN-L CH6-25

J3-44 RINGO6-H CH6-22

J3-13 DTR06-H CH6-20

13 14

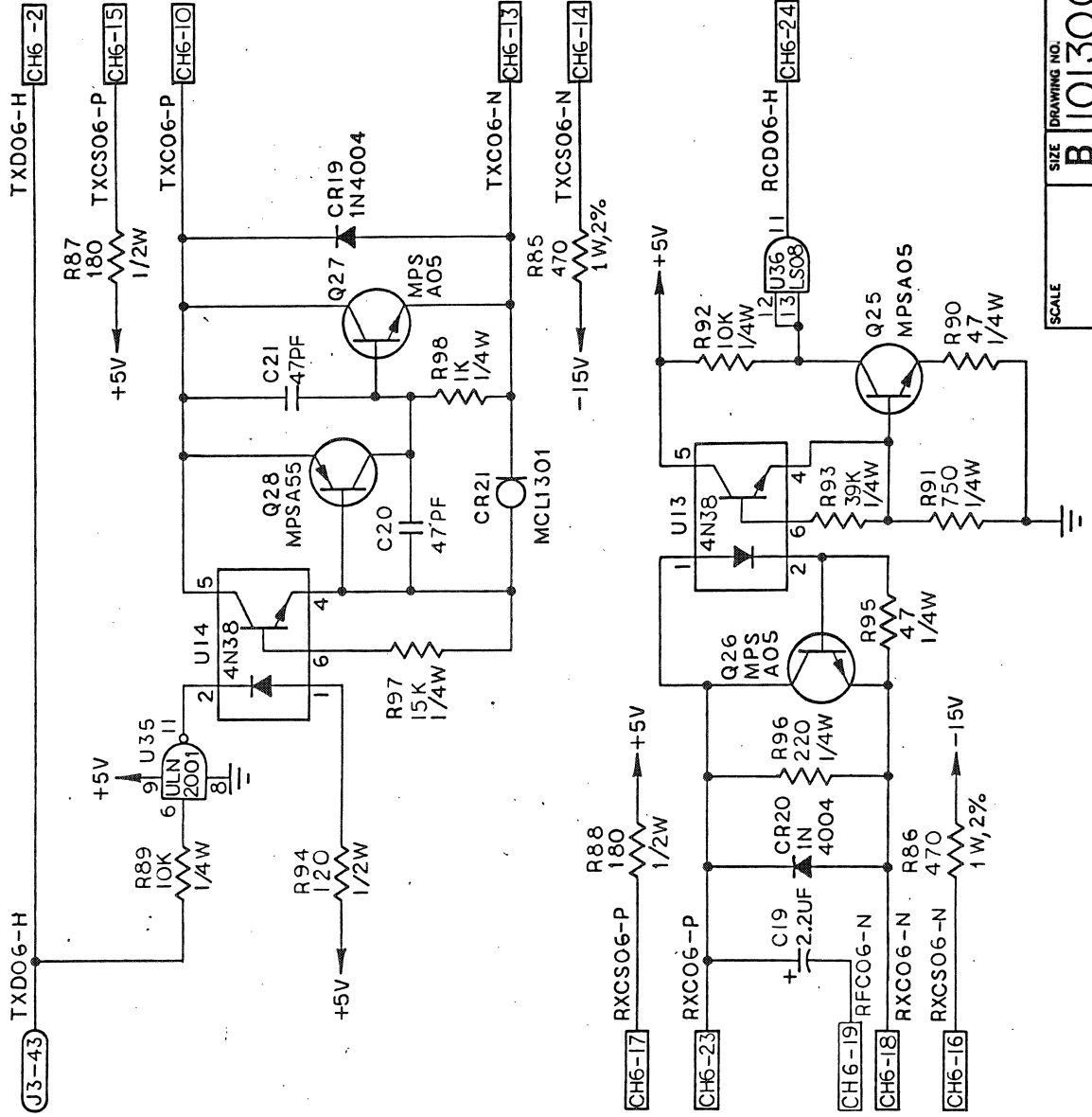
J3-14 CARRO6-H CH6-8

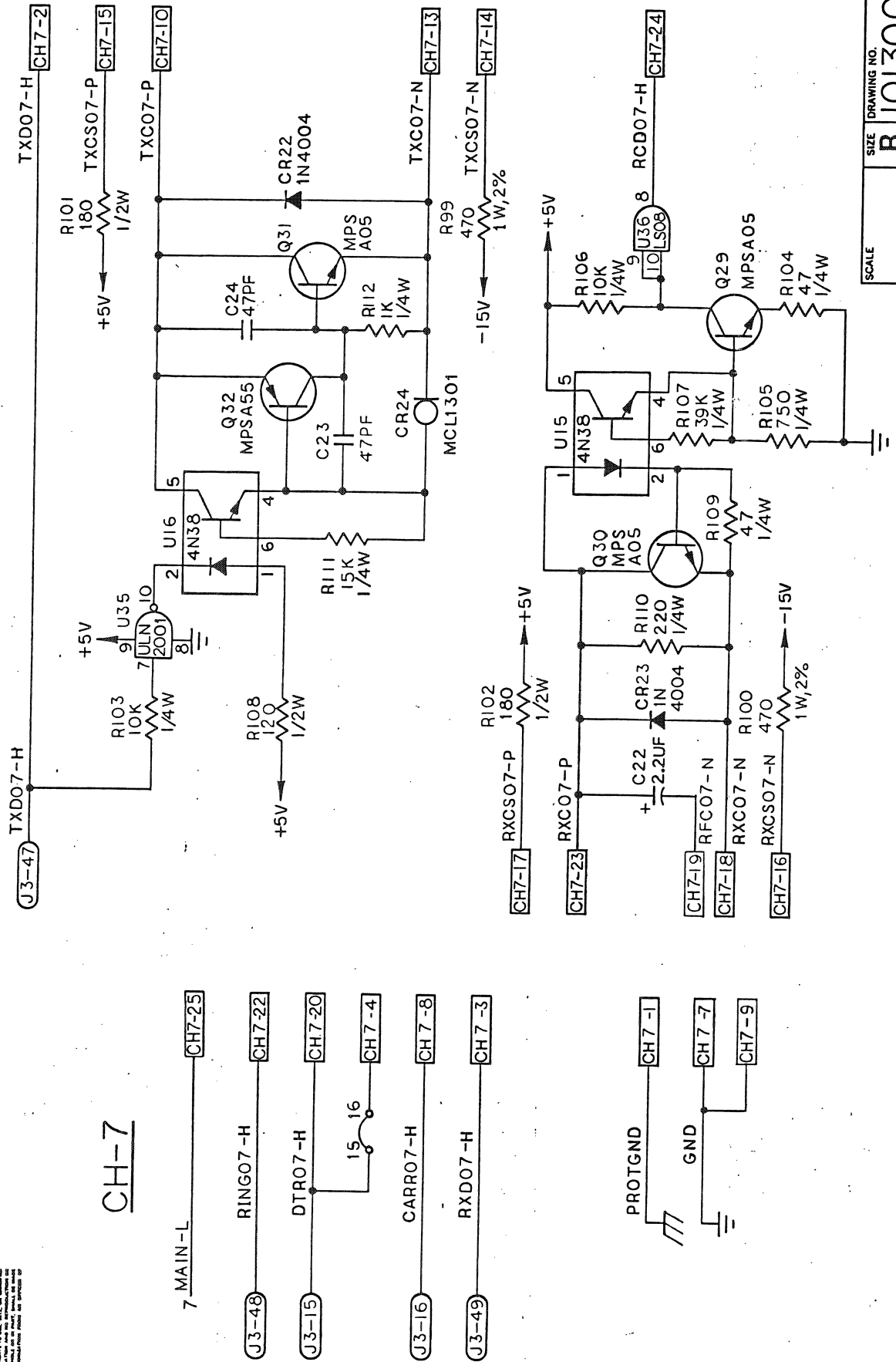
J3-45 RXDO6-H CH6-3

PROTGND CH6-1

GND CH6-7

CH6-9



CH-7

9-11C

$$\frac{7 \text{ MAIN} - L}{}$$

RINGO9-H

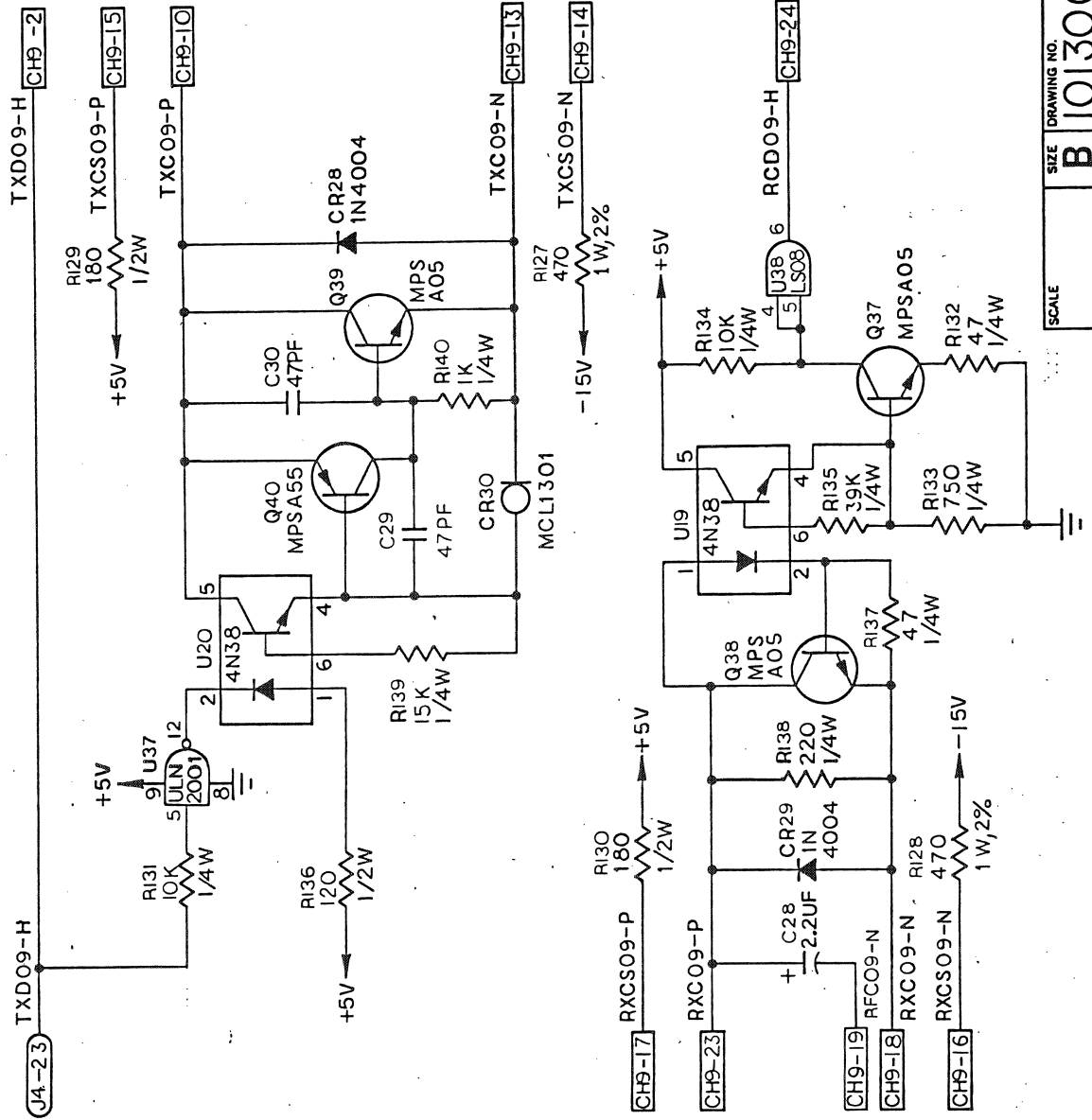
DTRO9-H

CARRO 9-H

RXD09-H

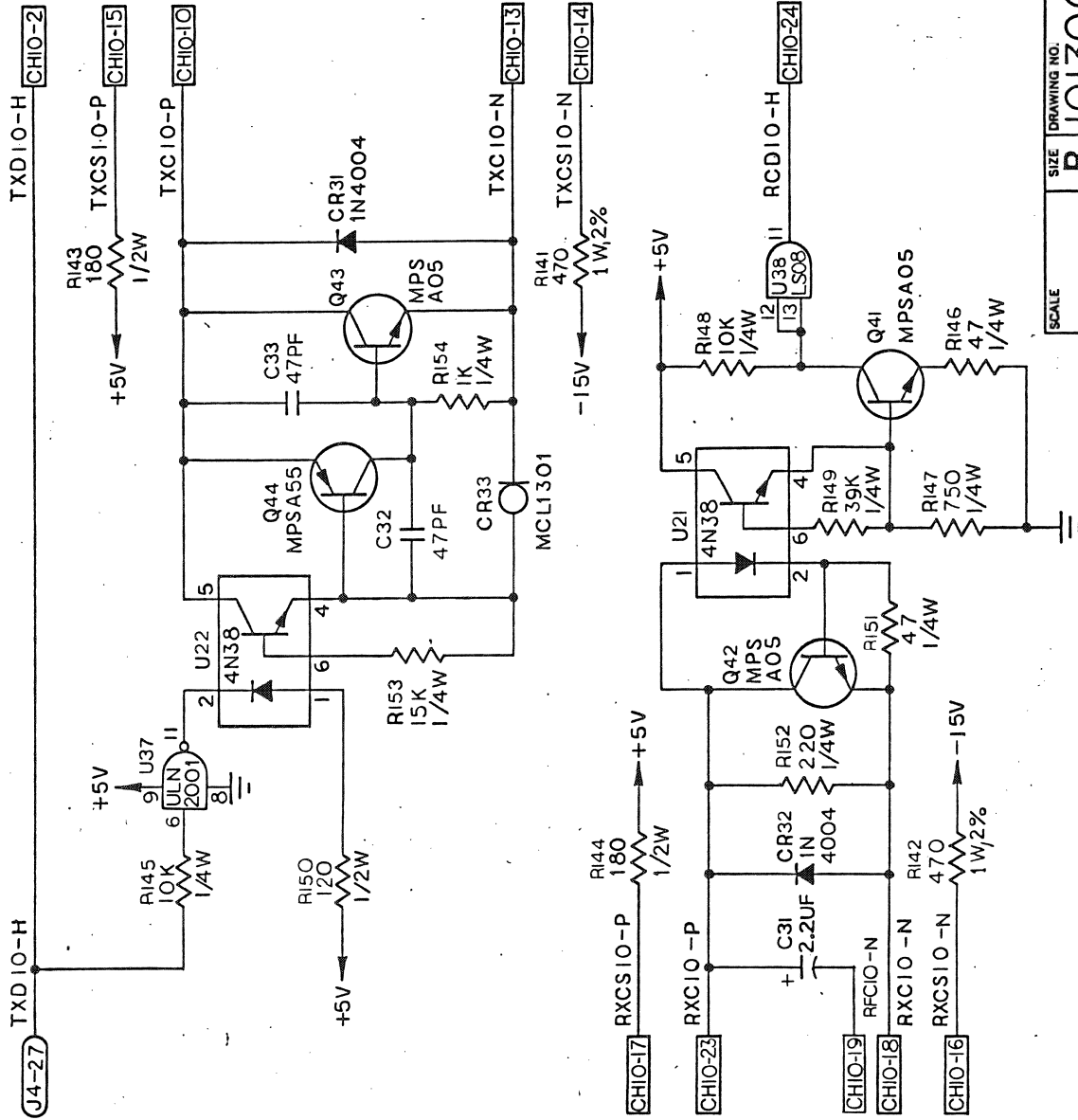
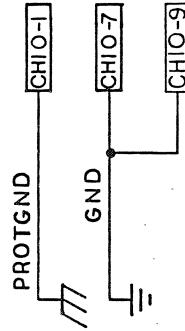
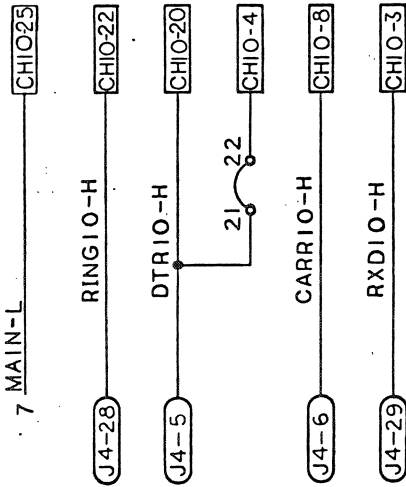
PROTGND

GND



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CH-10



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CH-11

7 MAIN-L CH11-25

J4-32 RING11-H CH11-22

J4-7 DTR11-H CH11-20

23 24 CH11-4

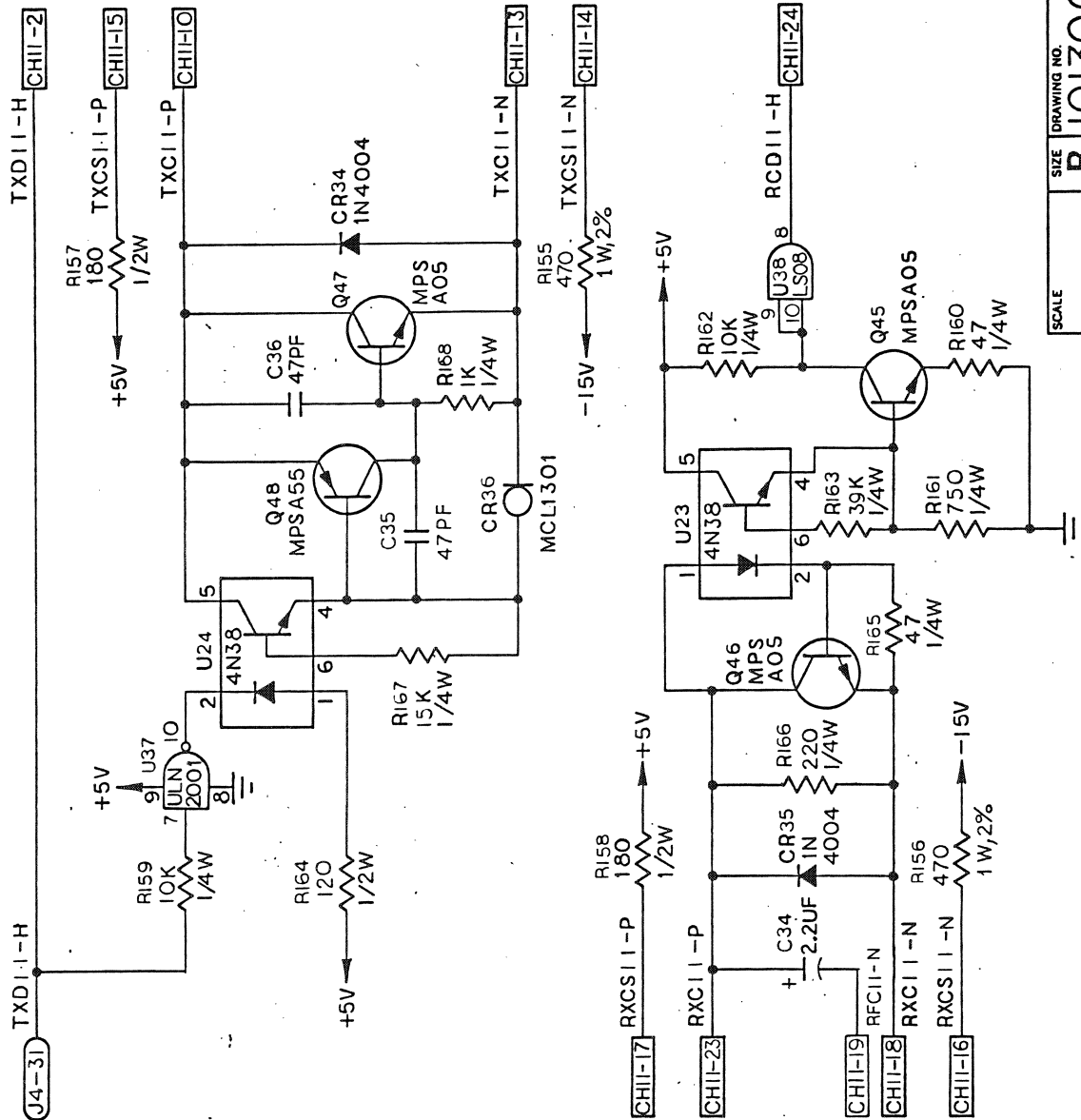
J4-8 CARR11-H CH11-8

J4-33 RXD11-H CH11-3

PROTGND CH11-1

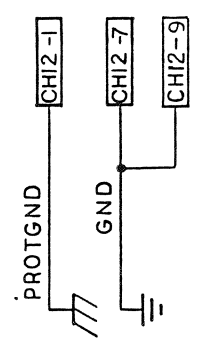
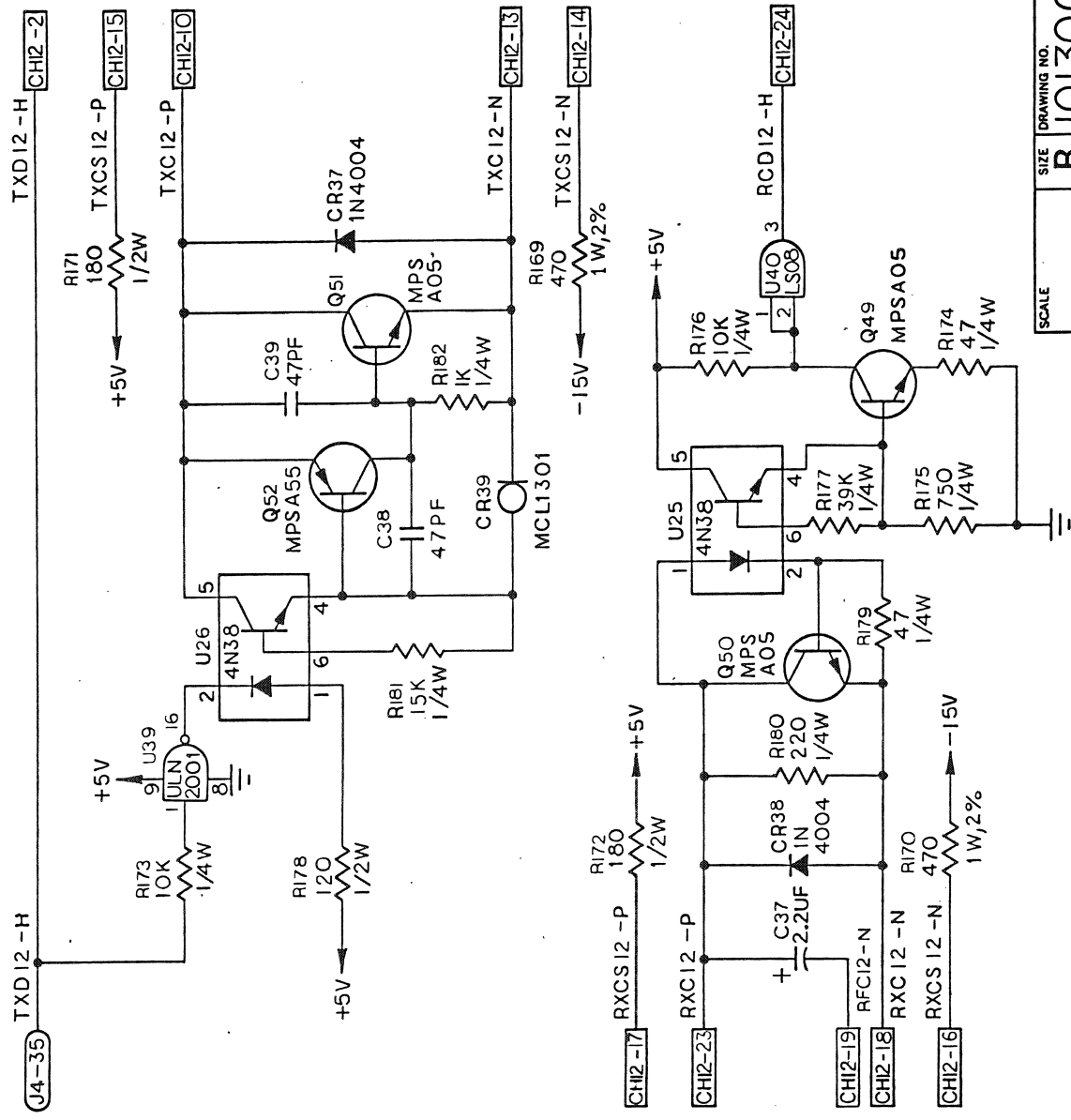
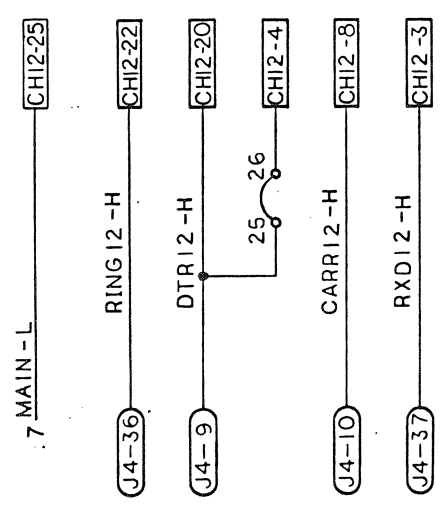
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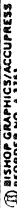
CH11-9



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CH-12





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CH-15

7 MAIN - L CH15-25

J4-48 RING 15 - H CH15-22

J4-15 DTR 15 - H CH15-20

31 32 CH15-4

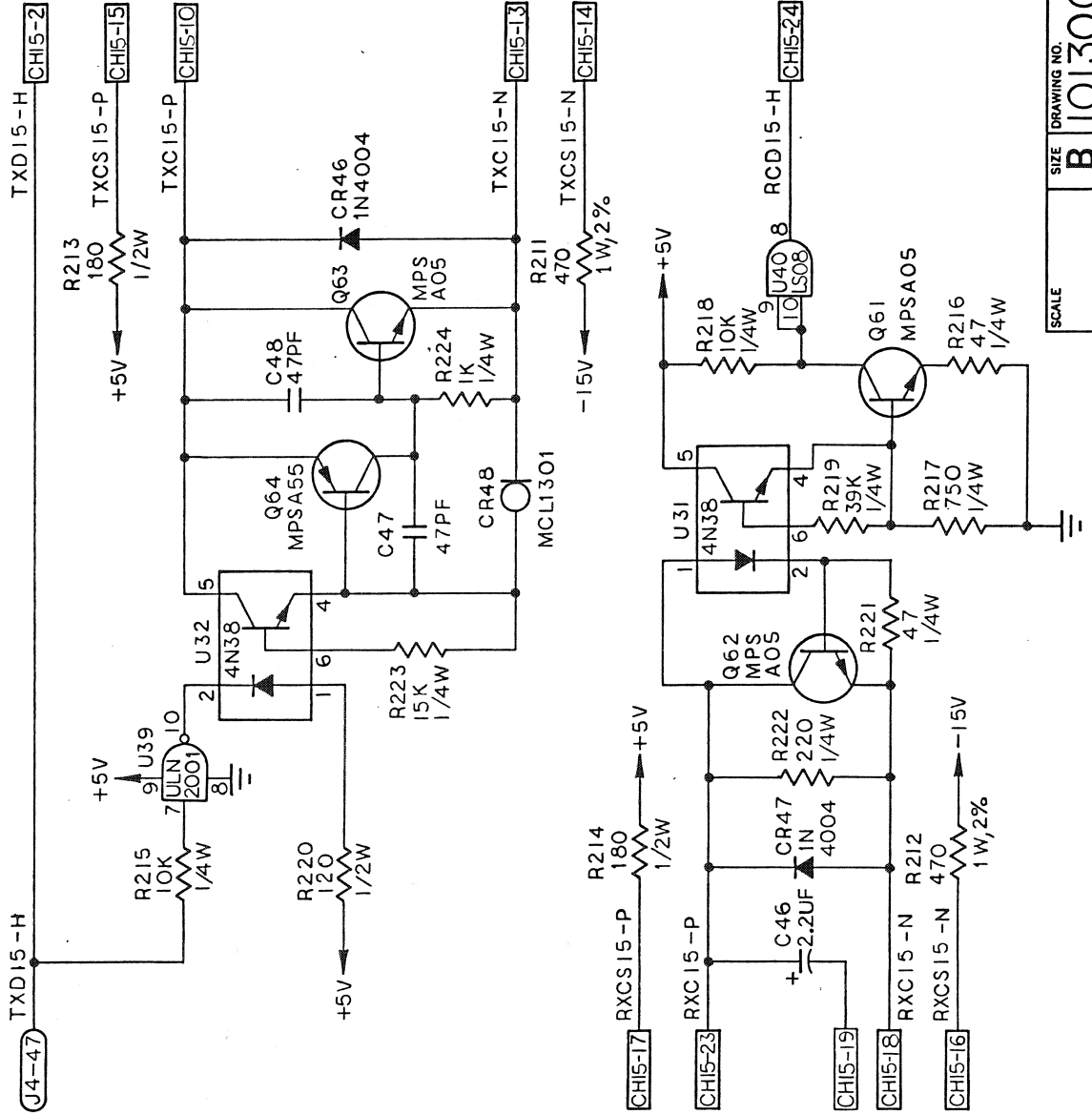
J4-16 CARR 15 - H CH15-8

J4-49 RXD 15 - H CH15-3

PROT GND CH15-1

GND CH15-7

CH15-9



J7-1	DT ROO-H
J7-2	CARROO-H
J7-20	RINGOO-H
J7-3	DT RO1-H
J7-4	CARRO1-H
J7-24	RINGO1-H
J7-5	DT RO2-H
J7-6	CARRO2-H
J7-28	RINGO2-H
J7-7	DT RO3-H
J7-8	CARRO3-H
J7-32	RINGO3-H
J7-9	DT RO4-H
J7-10	CARRO4-H
J7-36	RINGO4-H
J7-11	DT RO5-H
J7-12	CARRO5-H
J7-40	RINGO5-H
J7-13	DT RO6-H
J7-14	CARRO6-H
J7-44	RINGO6-H
J7-15	DT RO7-H
J7-16	CARRO7-H
J7-48	RINGO7-H

J7-19	TXD00-H	RXD00-H
J7-21		
J7-23	TXD01-H	RXD01-H
J7-25		
J7-27	TXD02-H	RXD02-H
J7-29		
J7-31	TXD03-H	RXD03-H
J7-33		
J7-35	TXD04-H	RXD04-H
J7-37		
J7-39	TXD05-H	RXD05-H
J7-41		
J7-43	TXD06-H	RXD06-H
J7-45		
J7-47	TXD07-H	RXD07-H
J7-49		

J8-1	DTRQ8-H
J8-2	CARRQ8-H
J8-20	RINGQ8-H
J8-3	DTRQ9-H
J8-4	CARRQ9-H
J8-24	RINGQ9-H
J8-5	DTR10-H
J8-6	CARR10-H
J8-28	RING10-H
J8-7	DTR11-H
J8-8	CARR11-H
J8-32	RING11-H
J8-9	DTR12-H
J8-10	CARR12-H
J8-36	RING12-H
J8-11	DTR13-H
J8-12	CARR13-H
J8-40	RING13-H
J8-13	DTR14-H
J8-14	CARR14-H
J8-44	RING14-H
J8-15	DTR15-H
J8-16	CARR15-H
J8-48	RING15-H

J8-19	TXD08-H	RXD08-H
J8-21		
J8-23	TXD09-H	RXD09-H
J8-25		
J8-27	TXD10-H	RXD10-H
J8-29		
J8-31	TXD11-H	RXD11-H
J8-33		
J8-35	TXD12-H	RXD12-H
J8-37		
J8-39	TXD13-H	RXD13-H
J8-41		
J8-43	TXD14-H	RXD14-H
J8-45		
J8-47	TXD15-H	RXD15-H
J8-49		

CHO-15 MAINTENANCE

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DTR00-H
J5-1 CARRO1-H
J5-4 RINGO1-H
J5-24
DTR01-H
J5-3 CARRO0-H
J5-2 RINGO0-H
J5-20
DTR02-H
J5-5 CARRO3-H
J5-8 RINGO3-H
J5-32
DTR03-H
J5-7 CARRO2-H
J5-6 RINGO2-H
J5-28
DTR04-H
J5-9 CARRO5-H
J5-12 RINGO5-H
J5-40
DTR05-H
J5-11 CARRO4-H
J5-10 RINGO4-H
J5-36
DTR06-H
J5-13 CARRO7-H
J5-16 RINGO7-H
J5-48
DTR07-H
J5-15 CARRO6-H
J5-14 RINGO6-H
J5-44

TXD00-H
J5-19 RXD01-H
J5-25
TXD01-H
J5-23 RXD00-H
J5-21
TXD02-H
J5-27 RXD03-H
J5-33
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J5-31 RXD02-H
J5-29
TXD04-H
J5-35 RXD05-H
J5-41
TXD05-H
J5-39 RXD04-H
J5-37
TXD06-H
J5-43 RXD07-H
J5-49
TXD07-H
J5-47 RXD06-H
J5-45

DTR08-H
J6-1 CARRO9-H
J6-4 RINGO9-H
J6-24
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J6-3 CARRO8-H
J6-2 RINGO8-H
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J6-13 CARR15-H
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J6-14 RING14-H
J6-44

TXD08-H
J6-19 RXD09-H
J6-23
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J6-23 RXD08-H
J6-21
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TXD12-H
J6-35 RXD13-H
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TXD13-H
J6-39 RXD12-H
J6-37
TXD14-H
J6-43 RXD15-H
J6-49
TXD15-H
J6-47 RXD14-H
J6-45

CHO-15 STAGGERED MAINTENANCE